Amendment Under 37 C.F.R. § 1.111 U.S. Application No. 10/677,241

Please delete the present Abstract of the Disclosure.

Please add the following new Abstract of the Disclosure:

ABSTRACT OF THE DISCLOSURE

In a method of restoring phase information, the estimated accuracy of phase is enhanced by correcting blur amount, which is caused by a focal size of a radiation source, in X-ray intensity to be used in a solving method such as the finite-element method. The method includes the steps of: (a) correcting blur amount for at least one of plural sets of detection data obtained by detecting intensity of radiation on plural detection planes at different distances from the object; (b) obtaining differential data representing difference between the plural sets of detection data where the blur amount has been corrected for at least one thereof; (c) obtaining Laplacian of phase on the basis of the differential data and the detection data; and (d) obtaining phase data of the radiation by performing inverse Laplacian computation on the Laplacian of phase.